

REMARKS

The Applicant thanks the Examiner for the careful examination of this application and respectfully requests the entry of the amendments indicated hereinabove. The Applicant also thanks the Examiner for the indication of allowance of Claims 17, 19 and 20.

Claims 1, 3, 5-7, 9-14, 17 and 19-24 are pending. Of the pending claim set, Claims 1, 3, 5-7, 10, 11, 13, 14 and 21-24 are rejected. Claims 21 and 23 are amended and Claims 22 and 24 are cancelled hereinabove. In addition, Claims 25-26 are added with support provided in the Specification as originally filed (i.e. paragraph 0022).

Claim 1 positively recites that the width of the body region is greater than a length of the gate structure. These advantageously claimed features are not taught or suggested by the patent granted to Chen et al. (column 3 lines 4-6, column 5 lines 18-27, column 5 lines 39-45; FIGS. 1c, 2 and 4). The Applicant respectfully traverses the statement in the Office Action (page 2) that Chen et al. teaches “the width of the body region is greater than a length of the gate structure. See the chart of Fig. 4., there the body width can be 1.2 microns and the length 0.10 and still be partially depleted”. The Applicant submits that Fig. 4 shows “the device width” (column 3 lines 5-7, column 5 lines 39-41) but not the width of the “body

region” as advantageously claimed (see also FIGS. 1c-1d and column 4 lines 19-21). Moreover, FIG. 4 of Chen et al. only illustrates “device width and length” (column 3 lines 4-6, column 5 lines 39-41). Therefore, Chen et al. does not teach that width of the body region is greater than a length of the gate structure, as advantageously claimed.

Regarding Claim 3, the Applicant respectfully traverses the statement in the Office Action (page 3) that “Chen et al. teach a memory device, where the gate structure is a tri-gate”. The Applicant submits that Chen et al. only teaches the use of a double gate (finFET) structure (column 3 lines 47-57, column 6 lines 38-46). Moreover, Chen et al. does not teach that the ratio of the width of the body region to the gate length is at least about 1.5:1, as positively recited in Claim 3.

Therefore, the Applicant respectfully asserts that Claim 1 is patentable over the patent granted to Chen et al. Furthermore, Claims 3 and 5-6 are allowable for depending on allowable independent Claim 1 and, in combination, including limitations not taught or described in the reference of record.

Claim 7 positively recites that the width of the body region is greater than a length of the gate structure. These advantageously claimed features are not taught or suggested by the patent granted to Chen et al. (column 3 lines 4-6, column 5 lines 18-27, column 5 lines 39-45; FIGS. 1c, 2 and 4). The Applicant

respectfully traverses the statement in the Office Action (page 3) that Chen et al. teaches “the width of the body region is greater than a length of the gate structure. See the chart of Fig. 4., there the body width can be 1.2 microns and the length 0.10 and still be partially depleted”. The Applicant submits that Fig. 4 shows “the device width” (column 3 lines 5-7, column 5 lines 39-41) but not the width of the “body region” as advantageously claimed (see also FIGS. 1c-1d and column 4 lines 19-21). Moreover, FIG. 4 of Chen et al. only illustrates “device width and length” (column 3 lines 4-6, column 5 lines 39-41). Therefore, Chen et al. does not teach that width of the body region is greater than a length of the gate structure, as advantageously claimed.

Similarly, Fried et al. does not teach that the width of the body region is greater than a length of the gate structure (column 7 lines 53-67, column 8 lines 13-18; FIGS. 2-4). Therefore, the combination of Chen et al. and Fried et al. also does not teach that the width of the body region is greater than a length of the gate structure, as advantageously claimed.

Regarding Claim 13, the Applicant respectfully traverses the statement in the Office Action (page 3) that “Chen et al. teach a memory device, where the gate structure is a tri-gate”. The Applicant submits that Chen et al. only teaches the use of a double gate (finFET) structure (column 3 lines 47-57, column 6 lines 38-46). Regarding Claim 14, Chen et al. does not teach that the ratio of the width of the

body region to the gate length is at least about 1.5:1, as positively recited in Claim 14.

Therefore, the Applicant respectfully asserts that Claim 7 is patentable over the patents granted to Chen et al. and Fried et al.; either alone or in combination. Furthermore, Claims 9-14 are allowable for depending on allowable independent Claim 7 and, in combination, including limitations not taught or described in the references of record.

Amended Claim 21 positively recites that the ratio of the width of the body region to a gate length is at least about 1:1. These advantageously claimed features are not taught or suggested by the patent granted to Chen et al. (column 5 lines 39-45; FIGS. 2 and 4). Therefore, the Applicant respectfully asserts that Claim 21 is patentable over the patent granted to Chen et al.

Amended Claim 23 positively recites that the ratio of the width of the body region to a gate length is at least about 1:1. These advantageously claimed features are not taught or suggested by the patent granted to Chen et al. (column 5 lines 39-45; FIGS. 2 and 4). Therefore, the Applicant respectfully asserts that Claim 23 is patentable over the patent granted to Chen et al.

For the reasons stated above, this application is believed to be in condition for allowance. Reexamination and reconsideration is requested.

Respectfully submitted,

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